BULLETIN

SPRING 2005

www.michigan.gov/bccfs



DIRECTOR'S COLUMN

HENRY L. GREEN

More than 2,000 code changes were reviewed during the International Code Council (ICC) code development hearing February 22 - March 4, in Cincinnati, Ohio. The proposed code changes ranged from the International Building Code to the International Zoning Code.

The Michigan codes for building, residential, plumbing, and mechanical are based on the International Codes. The process for resolving the proposed changes concludes with a hearing in Detroit, Michigan, September 25 - October 1. These changes will be the base for the 2006 edition of the I-code, on which the Michigan codes will be formulated. Michigan code officials will have a unique opportunity to be an integral part in the final determination in the 2006 codes.

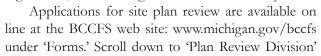
Participation in the code process is free and only takes time for a code official to attend the meetings. These final action hearings will offer code officials the background for changes in codes and the ability to interact with their peers from across the

Continued on page 6.

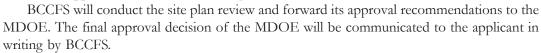
ANNUAL SCHOOL SITE PLAN REVIEW NOTICE

As the school year comes to a close and the school construction season moves into full swing, please remember that site plan review for all school projects is now done by the Bureau of Construction Codes and Fire Safety (BCCFS). This change became effective February 20, 2004, pursuant to an agreement with the Michigan Department of Education (MDOE). This requirement applies to all public and charter school projects. Private and parochial schools continue to go though the site plan approval process of the local government.

The criteria for site plan review include, but is not limited to, the following items: 1) Barrier free accessible route(s), 2) on-site vehicle parking, 3) Barrier free accessible parking, 4) fire separation distances, 5) internal access drives and walkways, 6) site grading, 7) site lighting, 8) fencing, and 9) open recreation areas. Where appropriate, items such as storm water drainage, site utilities, fire hydrant layout, fire department, and road (public way) accesses must also be approved by the various state, county, and local governmental agencies that govern these items. This may include driveway access from state trunk lines, utility easements, flood plain regulations, and buildings located near waterways.







For more information regarding school construction please visit the 'School Construction' link on the BCCFS web site.



This is the last free, printed and mailed edition of the *Bulletin*. The *Bulletin* is available electronically on the Bureau of Construction Codes and Fire Safety's home page under "What's New." Beginning with the August edition, we will offer a one-year subscription service for a cost of \$10. The subscription rate covers additional layout and design time, printing and mailing expenses.

If you are interested in continuing to receive a printed version of the *Bulletin*, please send a letter asking to be added to the *Bulletin* mailing list along with your name, address and a check or money order for \$10 made payable to "State of Michigan." Mail the request to: Bulletin Subscription, Bureau of Construction Codes and Fire Safety, P.O. Box 30255, Lansing, MI 48909. If you have not submitted your e-mail to be added to our electronic distribution list, please do so soon to: ppdavis@michigan.gov.



NEWS FROM INSIDE THE BUREAU

SCHEDULED BOARD MEETINGS

Meeting	Date	Time	Location
Barrier Free Design Board	May 20, July 15	9:30 am	Okemos – Conf Room 3
Board of Boiler Rules	June 7, Sept. 6	9:30 am	Okemos – Conf Room 3
Construction Code Commission	May 4, July 13	9:30 am	Okemos – Conf Room 3
Electrical Administrative Board	June 3, August 5	9:30 am	Okemos – Conf Room 3
Elevator Safety Board	June 17, Sept 30	9:30 am	Okemos – Conf Room 3
Fire Fighters' Training Council	June 8, August 10	10:00 am	Okemos – Conf Room 3
Manufactured Housing Commission	June 15, August 17	10:00 am	Okemos – Conf Room 3
Board of Mechanical Rules	May 25, July 27	9:00 am	Okemos – Conf Room 3
State Fire Safety Board	May 26, July 28	1:00 pm	Okemos – Conf Room 1
State Plumbing Board	June 7, July 20	10:00 am	Okemos – Conf Room 3

Dates and times are subject to change. Visit the **BCCFS** web site for updates.

LICENSE EXAMINATION SCHEDULE

Examination	Date	Location	Deadline
Boiler Installer and Repair	June 1 & 2	Okemos	May 6
Boiler National Boards	June 1 & 2	Okemos	May 6
Electrical/Fire Alarm/Sign	May 26	Escanaba	April 28
	June 13, July 19	Okemos	May 16, June 21
Electrician - Journeyperson	June 20, 21, 22	Okemos	May 20
Electrician - Master	June 23	Okemos	May 25
Elevator - Cont./Cert. of Comp.	June 17	Okemos	May 27
Elevator Journeyperson	June 14, August 9	Okemos	May 24, July 19
Mechanical Contractor	June 7, August 3	Lansing	May 9, July 6
Plumbers - Contractor	June 15, July 21	East Lansing/Escanaba	
Plumbers - Master and Journey	June 8, July 21	East Lansing	

Dates and times are subject to change. Visit the BCCFS web site for updates.

BCC&FS CONTACT INFORMATION

Mailing Addresses:

P.O. Box 30254 (Codes: general correspondence)

P.O. Box 30255 (Codes: permits, licenses, and other documents containing payment)

P.O. Box 30700 (Office of the State Fire Marshal, Fire Fighter Training Council)

 $P\!.O\!.$ Box 30704 (Office of Land Survey and Remonumentation)

P.O. Box 30222 (Office of Local Government and Consumer Services)

Lansing, Michigan 48909

Telephone Numbers:

Administration (517) 241-9302

Office of Administrative Services (517) 335-2972

Office of Management Services (517) 241-9313

Boiler Division (517) 241-9334

Building Division (517) 241-9317

Electrical Division (517) 241-9320

Elevator Safety Division (517) 241-9337

Fire Fighters' Training Council (517) 373-7981

Mechanical Division (517) 241-9325

Office of Local Government and

Consumer Services (517) 241-9347

Office of Land Survey and

Remonumentation (517) 241-6321

Office of the State Fire Marshal (517) 241-8847

Plan Review Division (517) 241-9328

Plumbing Division (517) 241-9330

For directions to the bureau offices, visit the BCCFS web site.

BOILER DIVISION

SUBCONTRACTING AND THE BOILER LAW

By Robert Aben, Chief Boiler Division

Recently, the boiler division discovered several situations where

unlicensed people performed boiler work. An investigation revealed that a company employing a licensed person pulled a boiler installation permit and subcontracted the work to a company not employing a licensed person.

Section 408.763, sub-section 13, of the boiler law states: A **person** shall not engage in the business of installing...or repairing boilers unless the **person** has obtained a license... and: An individual in the **employ** of a licensee is not required to be licensed. This means that an unlicensed person must be in the (direct) employ of a licensed person.



Boiler explosion

A licensed person cannot apply for a boiler permit and subcontract the actual work to another company not having a licensed person in their employ. The licensee applying for the permit must be in the

direct employ of the company actually doing the work.

Michigan Boiler <u>rule 408.4099</u> further clarifies in paragraph (2) that a person shall not engage in installing boilers under the name of more than 1 business at a time. A boiler licensee must record the name of the company under which he/she intends to use their license. If a licensee changes companies, the licensee must notify the Boiler Division of a change in affiliation.

Questions may be directed to the Boiler Division at (517) 241 9334.

BUILDING DIVISION.

LANDINGS AT DOORS - MICHIGAN RESIDENTIAL CODE

By Larry Lehman, Chief Building Division

The bureau continues to get questions related to residential stairways and the landings associated with them. R311.4.3 of the Michigan Residential Code (MRC) states "there shall be a floor or landing at each side of each exterior landing." R311.4.3 allows an exception for exterior landings provided the stairway has two or fewer risers and is not the required exit door. There no longer is an exception for exterior sliding doors.

The main question centers on the permissible height of an exterior landing at doorways. The second exception in R311.4.3 states "The landing at an exterior doorway shall be not more than 7 3/4 inches below the top of the threshold, provided the door, other than an exterior storm or screen door does not swing over the landing." Where exterior landings are required, the landing

may be a maximum of 7 ³/₄ inches below the threshold for the required exit door provided the exterior door doesn't swing over the landing, and the landing is not required to be part of an accessible route as referenced to the Michigan Building Code by R322 of the MRC. Additional landings where required at exterior doors other than the required exit door, may be a maximum of 8 ¹/₄ inches below the threshold.

The threshold for the required exit door is limited to a maximum height 1 1/2 inches above the adjacent interior floor surface. This has been confused with the permissible exterior landing height but is only intended to limit the height of the threshold at the required exit door.

Questions may be directed to the Building Division at (517) 241-9317.

THE BUREAU OF CONSTRUCTION CODES AND FIRE SAFETY OFFICES WILL BE CLOSED TO OBSERVE THE FOLLOWING HOLIDAYS:

MEMORIAL DAY MONDAY, MAY 30

INDEPENDENCE DAY
MONDAY, JULY 4

LABOR DAY

MONDAY, SEPTEMBER 5

ELECTRICAL DIVISION

HOSPITAL GRADE RECEPTACLES

Virgil Monroe, Chief Electrical Division

Where are "hospital grade" receptacles required? Article 517 of the Michigan Electrical Code covers the wiring requirements in health care facilities. "Hospital grade" receptacles are discussed in only two sections of this article. These sections are 517.18 (B) and 517.19 (B)(2).

Section 517.18 (B) requires each patient bed location in **General Care Areas** to be provided with a minimum of four receptacles. They shall be permitted to be single, duplex, or a combination or both. All receptacles, whether four or more, shall be listed "hospital grade."

Section 517.19 (B)(2) requires the use of "hospital grade" receptacles in the patient bed locations of **Critical Care Areas**.

"Patient bed location" is defined as the location of an

inpatient sleeping bed; or the bed or procedure table used in a critical patient care area.

"General Care Areas" are patient bedrooms, examining rooms, treatment rooms, clinics, and similar areas where a patient will come into contact with appliances such as a nurse call system, electrical beds, examining lamps, telephone, and entertainment devices.

"Critical Care Areas" are special care units, intensive care units, coronary care units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, operating rooms, and similar areas in which a patient is intended to be subjected to invasive procedures and connected to line operated electromedical devices.



ELEVATOR SAFETY DIVISION.

PROTECTION AGAINST UNINTENDED CAR MOVEMENT

By Calvin W. Rogler, Chief Elevator Safety Division

The Elevator Safety Division has received several questions from elevator contractors and journeypersons regarding the requirements for unintended car movement. There are two sections, American Society of Mechanical Engineers (ASME) A17.1-2000 and Section 2.19.2, that clarify the issue.

ASME A17.1-2000, Section 2.19.2 Protection Against Unintended Car Movement says:

All **electric traction elevators** shall be provided with a device that shall detect unintended car movement away from the landing with the hoistway door not in the locked position and the car door not in the closed position.

The purpose of unintended car movement protection is to prevent the car from leaving a landing with either a hoistway door or the car door not in a safe condition.

The protection must operate even if there is a failure of the following: the electric driving motor, brake, coupling, shaft, gearing, the control system, or any other component on which the speed of the car depends. The suspension means and the traction machine are considered to be in tact and the unintended car movement protection may be designed to use one or both of these devices to

stop and hold the car.

Unintended car movement protection must detect unintended movement of the car in either direction. If the unintended car movement protection relies on electrical power to operate, the loss of that power must cause immediate activation of the unintended car movement protection. The occurrence of a single ground or the failure of certain other parts of the elevator system cannot prohibit the detection means from properly operating and activating the unintended car movement protection. If a ground or failure of certain switches are detected the car must stop at or before the next scheduled landing and shall not be permitted to restart. The suspension means and the drive sheave of the traction machine are considered to be in tact, the unintended car movement protection may be designed to use one or both of these devices to prevent unintended car movement. The car shall not be permitted to start or run unless the emergency brake is manually reset.

New elevator installations with permits approved after December 31, 2003, must comply with these requirements. Existing elevators, unless altered, do not have to be upgraded to unintended car movement protection. For elevator alterations, Section 8.7 of ASME A17.1 should be reviewed to determine if unintended car movement protection is required as part of a specific alteration.





LOCAL GOVERNMENT & CONSUMER SERVICES

TRAINING PROGRAMS NOW AVAILABLE IN LANSING

By Scott D. Fisher, Director

Office of Local Government and Consumer Services

In an effort to provide training to a broader range of registered and certified inspectors, the inspector training programs for the fall of 2005 will be held at the new M-Tech Center in Lansing. This new state of the art training facility is Lansing Community College's West Campus located at 5708 Cornerstone Drive in Delta Township.

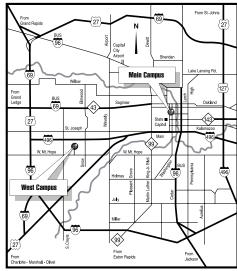
The programs that will be conducted by the Building, Electrical, Mechanical and Plumbing Divisions will be new, never before conducted programs and available on a first come, first serve basis. The fall programs in Lansing will take the place of the fall programs that were previously scheduled at the Higgins Lake, MacMullan Center. Inspectors scheduled to attend the Higgins Lake programs will be given first opportunity to attend the Lansing programs.

The divisions are designing their programs to be two, one-day programs that will be held back to back. This will allow a participant to attend either day of training, or both. Each day is being planned for seven hours of training. The cost of the training will be approximately \$50 per participant, per day, which includes lunch on-site.

Fall 2005 training dates are: Mechanical - 9/13, 9/14; Plumbing - 10/12, 10/13; Electrical - 10/20, 10/21; and Building - 10/25, 10/26 & January 24, 25, 2006

Additional information regarding specific content of each training program will be provided at a later date. Reservations can be made by contacting the Office of Local Government and Consumer Services at (517) 241-9347.

Lansing Community College West Campus Map



From I-496: Turn south on Creyts Road to Mt. Hope Turn left on W. Mt. Hope and continue eastbound for about 1/2 mile. Turn left onto construction



MANUFACTURED HOUSING

MANUFACTURED HOUSING REGULATION IN MICHIGAN

The Bureau of Construction Codes and Fire Safety (BCCFS) licenses and regulates manufactured home communities, retailers, and installer-servicers. The BCCFS also manages the State Administrative Agency (SAA) program, as the Housing and Urban Development's (HUD) Michigan liaison for assuring that producers of HUD-coded manufactured homes investigate consumer complaints in compliance with federal manufactured housing laws. There are currently no HUD-code manufactured home plants in Michigan. Specifically, the BCCFS, through the Office of Local Government and Consumer Services and the Building Division:

- Fields and resolves consumer complaints against manufacturers, retailers, installer-servicers and community operators.
- 2. Audits, inspects and licenses retailers and communities.
- Licenses and tests installer-servicers.
- 4. Coordinates with the Michigan Department of Environmental Quality (MDEQ) to review and approve construction plans of community developers. MDEQ reviews the proposed community water supply, sewage and drainage features and annually inspects these systems after the community is operational.

- 5. Analyzes municipal manufactured housing community ordinances and prepares them for review by the Michigan Manufactured Housing Commission. The commission is an 11-member appointed body created in 1976 to establish policies to regulate ordinances, protect manufactured homeowners' rights and to set fair business practices in the manufactured housing industry. Meetings are posted on the bureau's web site at www.michigan.gov/bccfs.
- 6. Coordinates with the Michigan Secretary of State in issuing manufactured home titles.

The issuance of permits to transport manufactured homes on state roadways is handled through various agencies, including the Michigan Departments of Transportation and State Police. BCCFS and its predecessor agency, the Manufactured Housing Division, have regulated the manufactured home industry since the Mobile Home Commission Act (1987 PA 96) became effective in January of 1977. The MDEQ previously regulated the industry since 1939. The Act, the Manufactured Housing Commission Rules and other information about the agency and the commission can be accessed at the bureau's web site as noted above.

DIRECTOR'S COLUMN, CONTINUED

United States.

Information on the conference is available through the ICC web site, which can be accessed at: iccsafe.org. The site offers information on the conference and the Report of the Public Hearings, which contains all of the action taken at the Cincinnati hearing. This includes approved modifications, reasons for changes and committee action.

When reviewing the Report of the Public Hearings, individuals may submit comments on the hearing action to membership by filing a public comment on a particular code change by June 16, 2005. These comments will be published in a Report of the Public Hearing. Once the comments are published all parties will have an opportunity to review the comments and evaluate the need for further change or support of the original proposal.

Take advantage of the proximity of the hearings and the opportunity to have an influence in the development of the I-Codes, which will be used throughout the country.

MECHANICAL DIVISION.

EQUIPMENT ON ROOFS, ELEVATED STRUCTURES

By Tennison Barry, Chief Mechanical Division

The Mechanical Division has received quite a few questions regarding the installation of equipment on roofs and elevated structures. Following are the basic requirements to take into consideration when installing or inspecting equipment in such locations.

- 1. Access to the roof or elevated structure When equipment is installed on roofs or structures more than 16 feet above grade, a permanent, approved means of access shall be provided. Such access shall not require climbing over anything greater than 30 inches high or walking on roofs having a slope greater than 4/12. Michigan Mechanical Code Section 306.5.
- 2. Access to the equipment Where equipment is installed on a surface having 3/12 or greater slope and having an edge more than 30 inches above grade, a level platform shall be provided on each side where access is required. Michigan Mechanical Code Section 306.6.
- 3. **Guards** Where equipment is installed within 10 feet of a roof edge or open side of a walking surface and such edge or open side is more than 30 inches above grade. The guard shall extend not less than 42 inches above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21- inch diameter sphere. Michigan Mechanical Code Section 304.10.

Questions may be directed to the Mechanical Division at (517) 241-9325.

PLAN REVIEW DIVISION_

ACCESSIBILITY & PRIVATELY-OWNED CONDOMINIUMS

By Usha Menon

Plan Review Division

The Plan Review Division has received several questions regarding the compliance for accessibility in privately-owned condominiums. In the 2003 Michigan Building Code (MBC), buildings are classified based on the use and occupancy. Residential occupancies are classified into different groups based on the nature of stay, permanent or transient and number of occupants. Ownership or tenancies are not an issue in use group classifications or code compliance.

For all residential occupancies regulated under the MBC, compliance is required for accessibility when there are four or more dwelling or sleeping units in one structure. The level of accessibility is dictated based on the number of units in one structure and/or site.

Because the condominium occupants are permanent in nature, the dwelling units are classified as group R-2 or R-3. Based on the number of units, these occupancies shall provide type A and type B dwelling units. The design guidelines for these dwelling units are specified in the ICC/ANSI A117.1-98. Section 322 of the 2003 Michigan Residential Code also directs the code user to the MBC for accessibility requirements. Section 1107 provides the requirements for accessible dwelling and sleeping units with no exceptions for ownership. Therefore, privately-owned condominiums shall be in compliance in accordance with the MBC accessibility guidelines.

It should be noted that developers, designers, and building departments have been successfully sued by the federal government. Developers and designers have been fined and required to provide the required accessibility. Cities have been required to train all code officials in the requirements of accessibility. Building officials in Michigan, who ignore the accessibility requirements may face sanctions by the Construction Code Commission. The Barrier Free Design Board has not accepted individual ownership of units as a reason for an exception to the code. Questions can be directed to the Plan Review Division at (517) 241-9328.

PLAN REVIEW DIVISION

ISSUING A PERMIT FOR A PREMANUFACTURED HOME

By Irvin J. Poke, AIA, Chief Plan Review Division

Before the permit is issued for a premanufactured unit approved by the Bureau of Construction Codes and Fire Safety (BCCFS) the building official should request a copy of the Building System Approval Report (BSAR). This document will show the manufacturer's model number and the specific design data that has been approved by BCCFS. Each manufacturer is issued this document for each unit approved. Do not take the applicant's assertion that the unit is "similar to" a model that has been approved. If a specific unit does not have a BSAR that shows exactly what is being set, the model is not approved.

The building official should also request a copy of the approved drawings, which have the approval stamp of the BCCFS and the exact layout of what has been approved. The manufacturer cannot make any changes in the construction unless the BCCFS approves them. If there are any changes, other than color, wall coverings, floor coverings and appliances, the plans must go back through the approval process in accordance with rule 1141. The BCCFS requires approximately 3 weeks for the review approval process for construction changes.

The enforcing agency may issue permits for the foundations and other site work before the BSAR is approved. The construction documents for the foundations and other site work must be reviewed and approved by the code official. These documents should

be specific to the site and the soil conditions.

The approved building system (construction documents) will show what is constructed in the factory and the work that must be completed at the site for a complete building. The code official shall review these construction documents and inspect as required. If violations are found, it should be determined if they were caused during the manufacturing process or during installation. Violations caused during installation are to be cited to the permit holder for the work involved as would be done for any on site work. The bureau does not need to be notified. The violations attributed to the manufacturer shall be reported in writing to the Plan Review Division as required by rule 1142. The form for reporting such violations is available at http://www.michigan.gov/documents/ cis bcc premvio 36796 7.pdf. It is recommended that an inspector take this form to all inspections of premanufactured units to assure that all the right information is gathered the first time. The violations will be investigated and the manufacturer ordered to make the corrections as necessary.

The Plan Review Division publishes the approved BSAR's on the BCCFS web site at http://www.cis.state.mi.us/dms/home-bcc.asp. If you have the BSAR number or the manufacturer name you can check to see if the model you are considering is approved. Questions may be directed to the Plan Review Division at (517) 241-9328.

PLUMBING DIVISION

UPDATE CLASS FOR JOURNEY LICENSE RENEWALS &

UNAPPROVED PLUMBING PRODUCTS

By Robert G. Konyndyk, Chief Plumbing Division

Update course requirements for journey license renewals and unapproved cast-iron pipe and fittings have recently been major areas of concern for the Plumbing Division.

Recently, journey license renewals were sent out and are due before April 30, 2005. The State Plumbing Act, 2002 PA 733 requires journey licensees to complete a 2003 Michigan Plumbing Code update class before April 30, 2005. The State Plumbing Board has established the class as a 5 hour course. Class criteria and approved instructor information have been mailed to applicants and posted on the Bureau of Construction Code and Fire Safety web site.

Journey license renewal forms returned for processing without course certificates or accompanying certificate attachments will not be processed. The division will follow the law requirements by imposing the following:

1. Attendance for a 2003 update class will be required now or before any renewal consideration in accordance with section 25(2).

- 2. A license renewal fee of \$20 will be required in accordance with section 31 (2) (a).
- 3. A reinstatement fee of \$25 will be required in accordance with section 31 (3) (a).

It is not necessary to call the division and check on the status of mailed-in update course certificates. If your certificate has not been received you will be contacted and the problem will be resolved through license renewal correspondence.

Unapproved Plumbing Products

The Plumbing Division has recently reviewed cast-iron pipe and fittings manufactured over seas for compliance to code standards. The products were not acceptable based upon a review of four test reports and a listing documentation. Installers and inspectors are advised to make sure their products meet code standards, have state Certificate of Acceptance, or meet formal documented approval policies.

Questions may be directed to Robert Konyndyk, Chief, Plumbing Division, (517) 241-9330.

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Henry L. Green Editor:

Beth Hunter Aben

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STATE FIRE MARSHAL

TEST EMERGENCY EXIT DOORS

Andy Neumann, State Fire Marshal

Building and fire safety codes and standards require regular testing and maintenance for various systems in a building, such as fire suppression, fire alarm, fire extinguishers, kitchen hood suppression, elevators, and emergency generators. However, when it comes to the



maintenance and testing of emergency exit doors to guarantee that they function as originally designed, there are no specific codes. Maintenance and operation are left to the owner of the building to verify.

Some facilities, such as hospitals and nursing homes, are required to have annual inspections by the fire code official, at which point all systems, as well as the emergency exit doors, are inspected.

If a door cannot operate due to warping, rust, improper or broken hardware, snow banks or unauthorized locks, a tragedy could occur. Regular inspections of all emergency exit doors by building maintenance, or the building owner, could help reduce the chance of door failure. If these doors fail to operate properly in an emergency situation, the owner of the building could be liable if someone is injured.

Even though not mandated by the codes and standards, the Office of the State Fire Marshal recommends that the building owner, or a qualified individual, inspect all emergency exit doors, and all required fire rated doors, regularly and keep a written record of such inspections. Doing so could help protect the owner from potential liability and help guarantee a safe environment for all occupants of the building.

Questions may be directed to the Office of the State Fire Marshal at (517) 241-8847.